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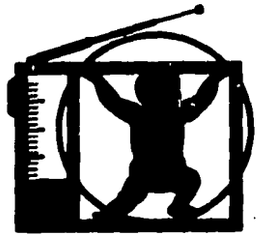

NATIONAL COUNCIL ON INTERNATIONAL HEALTH

ANNUAL MEETING

JUNE 14-17, 1987

HEALTHCOM PRESENTATIONS

CONTENTS

Note: Presentations are invidividually numbered.

PN-ABJ-466

PROGRAM PLANNING RESEARCH:

COMMUNITY INTERVENTION STUDIES IN MALARIA

MALAWI, AFRICA *

Presented at the 14th Annual Conference of the National Council for International Health, June 14-17, 1987 Washington, D.C.

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* Submitted to the Ministry of Health for clearance, May 1987

PROGRAM PLANNING RESEARCH:
COMMUNITY INTERVENTION STUDIES IN MALARIA
MALAWI, AFRICA

ABSTRACT:

Ministry of Health policy for malaria control in Malawi places emphasis on providing chloroquine at the community level for presumptive treatment of fevers and for routine chemoprophylaxis among pregnant women. As a means of increasing utilisation of chloroquine at the village level in accordance with this policy, thirty eight Traditional Birth Attendants (TBAs) were trained in a two-day session to diagnose and treat malaria in children under five and pregnant women. TBAs were regularly supervised and taught to keep records on numbers of chloroquine tablets prescribed by age. TBA performance was evaluated by examination of their record forms and through reports by mothers of children with recent fevers. Results of the evaluation indicate that TBAs are acceptable sources of advice and treatment to mothers with children who have fever. Mothers in the area where the TBAs had been trained reported that they used nearby health facilities less often as a source of advice for fever among their children under five, though this has not been confirmed by health facility reports. It was found that over 90% of doses of chloroquine as recorded on the TBA record form were correct for age. The cost of chloroquine required to assure treatment of children under five was estimated for the study area, using current chloroquine costs, printing and paper costs and Ministry of Health salaries, and extrapolated to the nation.

COMMUNITY INTERVENTION IN MALARIA

PRE-PROGRAM RESEARCH

(PICTURE OF MOTHER WITH CHILD) Imagine yourself as a young child in rural Malawi, your body wracked with fever and chills and aches, diarrhoea and headaches from a horrible disease called malaria. OR - Put yourselves in the shoes of that child's parents. You live in a village 10 miles away from the nearest clinic and help for your child is inaccessible because the roads are impassable due to floods.

Malaria is a significant health problem in Malawi. During 1986, malaria was responsible for one third of all outpatient visits and for at least 10 percent of hospital deaths.1 Incidence of fever/malaria in children under five is more than 13 episodes per year.2 The economic impact of malaria as well as the human suffering associated with both morbidity and mortality are significant, and have made malaria control a high priority within the Ministry of Health.

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1 Ministry of Health Outpatient Records, 1986 and 1983, Lilongwe, Malawi

2 Ministry of Health Serosurveys, August 1986, December 1986, and April 1987; Karonga and Salima Districts, Malawi

Malawi is a small, landlocked country in southeastern Africa. (slide of Africa map). It is characterised by densely situated rural villages (slide), smallholder farms (slide), a high infant and childhood mortality rate, (slide) and high incidences of immunisable and infectious diseases.

In Malawi, communication about health relies principally upon interpersonal channels, since mass media channels are restricted to radio and newspaper. The literacy rate is 20%. Radio's reach is limited to about 14 percent of the rural population. One of the activities of the HEALTHCOM Project in Malawi has been to examine the potential benefits of using Traditional Birth Attendants as an additional channel for the delivery of malaria information. Beginning in December 1986, funds and technical assistance from the CCCD and HEALTHCOM Projects were focussed on research to learn: (slide)

- Can Traditional Birth Attendants learn to diagnose and treat malaria in children under five?
- Will Mothers accept advice and treatment for malaria from Traditional Birth Attendants?
- What are the costs of providing chloroquine through Traditional Birth Attendants?

The work was undertaken in 47 villages within a 9 kilometre radius of four major health facilities in the Salima District of Malawi (slide of Salima), very close to Lake Malawi, where malaria transmission occurs year round. Two study areas were defined, a control and intervention area. (Slide:

INTERVENTION AREA	CONTROL AREA
38 TBAS TRAINED	NO TBAS TRAINED
HEALTH WORKERS RETRAINED	HEALTH WORKERS RETRAINED

In the Intervention Area, 38 traditional birth attendants (TBAS) were trained to supply chloroquine to children under five. In the Control Area, routine health services continued as before. In both areas, health workers in nearby clinics were given refresher training in malaria diagnosis and treatment, and were instructed to give specific health education messages to mothers of children with fevers.

(Slide of TBA) TBAs in the 18 villages in the intervention area were identified by village headmen, contacted and advised that a two day training session about the diagnosis, treatment and prevention of malaria was being held in their area. 38 TBAs signed up for the training course.

(Slide) Training of traditional birth attendants was conducted over a two day period. TBAs were taught:

* presumptive diagnosis of malaria,

* prescribing correct quantities of chloroquine tablets for age,

* tepid sponging to reduce fevers,

* preventive actions to prevent mosquito breeding around the home, and

* record keeping.

Similar training sessions were held with health workers. Specific instructions were given to both TBAs and health workers during the training sessions that they should provide the mother of the child with malaria with the correct number of chloroquine tablets for the child's age or physical development group, to tell the mother that the child has malaria, to provide instructions about how many days the tablets should be taken, and to discuss preventive measures that can be taken around the home, such as burning of cow dung, and elimination of breeding sites by destroying water collection sites.

(SLIDE) These 38 TBAs were advised that during the period of the study they would be provided with chloroquine on a monthly basis, and they were encouraged to provide their services at no cost to children under five during the period of study. They were also requested to provide chloroquine preferentially to children under five and pregnant women, although it was realised that they would be required to provide chloroquine to other village residents as well. After their return to the village, TBAs were visited each month (slide) by a member of the study team at which time records were reviewed, problems discussed, diagnostic/treatment procedures reviewed and chloroquine stocks replenished.

TBA performance and acceptability by mothers were evaluated by three different methods:

SLIDE:

* serological practices surveys to obtain mothers' reports of where and how their children with fevers were treated;
* review of the TBA record forms each month to determine if correct doses of chloroquine were recorded for the age of the child seen; and
* review of health facility outpatient records to determine dosages of chloroquine dispensed by age, and whether there was any change in the pattern of visits of children under the age of five years for malaria.

Results

Mothers in both the intervention and control areas reported the source of advice for fever in children under five years in two practice surveys in December 1986, before the TBA training, and in April 1987, four months after the training was conducted. Almost 100% of mothers consulted health workers for malaria in their children during December, in both the intervention and control areas. (SLIDE) This slide shows that after the TBA training, 71% of those same mothers consulted TBAs instead of health workers in the intervention area. In the control area, 99% of mothers continued to consult health workers for malaria in their children. This demonstrates that if TBAs are trained to treat malaria, they will be an acceptable source of advice to mothers for fever in their children under five.

(SLIDE) This slide shows mothers' reports of the dosage of chloroquine they received from either a health worker or TBA for their children under five, categorized by whether the dose was correct, under or over for the age category. Mothers recollect receiving an underdose of chloroquine in over 50% of treatments, either by a health worker or TBA. This data may reflect a mother's inclination to give less chloroquine than the treatment requires rather than her recollection of how many tablets received for her child. We have seen during this study the reluctance of villagers to request the full dose of chloroquine,

when they were required to come to the TBA for three successive days to collect their treatment. Villagers report to stop taking chloroquine "once the symptoms have disappeared" or one to two days after beginning treatment. This would account for the majority of mothers under-reporting the amount of chloroquine taken by their children. It does not necessarily demonstrate that inaccurate dosages were given out either by TBAs or health workers. However, continued underdosing by mothers, health workers, and other chloroquine suppliers is a problem and may contribute significantly to increasing chloroquine resistance in Malawi.

TBAs report that they prescribe correct dosages more often than health workers. During our monthly visits to the TBAs, we tested them all by asking them random ages and treatment dosages. At our most recent visit, 95% of the TBAs responded with the correct dose. Figure 6 shows dosages recorded by TBAs and health workers for the most recent month. Health worker records showed that ONLY 18% of treatments were given correctly. TBA records showed that 92% of treatments were given correctly. Our stock-taking figures and the in-depth interviews reinforced our belief that TBAs were dispensing chloroquine in the amounts recorded on their record forms.

The next table shows mother's reports of the number of days they were instructed by TBAs and health workers to treat their

child. This information was probably the most important message that could be given by TBAs or health workers to mothers. There is a significant difference between correct instructions to take the chloroquine over three days between TBAs and health workers. Our data suggests that mothers may remember the diagnosis, and treatment instructions better when told by a TBA than a health worker. TBAs are neighbors, often friends of mothers whose children are brought for treatment. The treatment occasion occurs under a tree or on the veranda of a neighbor's house, not in the crowded, loud, and inhibiting environment of a health clinic. Mothers report not wanting to go to the clinic unless they have a clean cloth /chitenje/to wear. They can visit the TBA just as they are. The TBA probably spends more time with the mother and her child than the health worker would. and the time that it takes the mother to get her child treated is much shorter, considering the distance between home and treatment and the lack of waiting time to receive the treatment.

Our estimate of the amount of chloroquine needed to treat children under five was raised significantly by our suspicion that the TBAs would have to treat adults as well as children. This table shows the number of chloroquine tablets reported to have been distributed by TBAs, by age group. In April, 42% of the treatments recorded as having been treated were to children under five; these children received 21% of the chloroquine tablets distributed. This data supports our theory that in order

to treat children under five, treatment must be given to all villagers.

Provision of this extra chloroquine obviously has an impact on the cost of the program. While village based distribution systems may be effective and acceptable, they are not inexpensive. Many more children are reached than are reached by health centres alone, and the cost of providing free health care to a large population like Malawi's is significant. (SLIDE) This next table shows the cost of providing chloroquine to children under five for the treatment of fevers. These costs include labor costs for record forms, supervisor salaries, and Malawi Government Tender Prices for chloroquine. The cost per treatment of fever in children under five is estimated to be 28 cents. Twenty-eight cents is approximately one half of the daily wage of a rural laborer in Malawi.

This table shows the expected cost of training for TBAs. From our study we can estimate the cost of training one TBA to be $20.32. This is based on one training session where 38 TBAs were trained, but we do not expect that the cost per TBA trained would drop significantly, should TBAs be trained throughout the nation.

Cost estimates for the nation were calculated assuming that the program would be extended to the national level gradually over a five year period. (SLIDE) This table shows the projected

costs of a phased five year program to provide chloroquine to children under five years of age through trained TBAs in all villages, including chloroquine, supplies, and supervision. Costs of training, based on numbers of TBAs trained, would be an additional cost, estimated at $410,400 if one TBA was trained in each village in Malawi. It is clear that recurrent costs required to provide chloroquine to children with fevers by TBAs in the community are considerable, and will continue to increase each year with the inflation rate as more TBAs are trained. These costs can not be expected to be recovered from health facilities, where demand for chloroquine may decrease when there is widespread provision at the community level. The decrease in health facility costs would be difficult to estimate in terms of savings. One would expect that a decrease in children seen with malaria, presently one third of all outpatient visits of children under five nationwide, would permit already overextended health workers to concentrate on other disease problems. By training TBAs to conduct other simple preventive and treatment activities, such as providing ORS to children with diarrhoeal disease to prevent dehydration, impact on the health facility could be even more important.

(Slide of TBA with patients) TBAs in Malawi are usually paid, in cash or kind, for obstetrical services which they perform. In this study they were requested to provide both consultation for fever and chloroquine to community members at no

cost. If TBAs are expected to continue malaria and other diagnostic and treatment services as part of community participation in Primary Health Care it must be recognized that at some time they may choose to charge a fee for their services. Fees for presumptive treatment of fevers, if appropriately structured could provide both a fee for service necessary to assure continued participation of TBAs and a source of income to partially finance both the training and the recurrent costs associated with providing chloroquine at the village level.

Cost recovery measures would necessitate a logistics system with the capacity for collecting money, but one which could operate within the present Ministry of Health district to health centre distribution system for commodities.

Our data does not, however, give us information about utilisation of TBAs, should the chloroquine have an associated cost. Even small fees may alter the acceptability of TBAs as a source of advice and medication. Mothers with severely limited income may choose to take their child to a health facility where no fees are required. They may attempt to treat the fever at home with less costly medications by obtaining medicine from traditional healers or local shopkeepers. Chloroquine is available from village shops in Malawi at a current cost of 5 cents per tablet. Antipyretics are available at less than half this cost. Such economic dynamics must be taken into consider-

ion of fees are to be charged by TBAs, and fees should be set only after thorough study of the maximum fee allowable to ensure maximum utilization.

The preprogram research demonstrated that: SLIDE:

* TBAs are an acceptable source of advice for fever for mothers of children under five years of age. Mothers who's communities had a trained TBA reported going less often to health facilities for their children's fevers.
* Mothers who visited TBAs remember the correct dosage of chloroquine at least as well, and perhaps slightly better than mothers of children who visited health centres.
* Mothers remember significantly better when told by a TBA that they should give their child chloroquine for three days than when told the same information by a health worker.
* TBAs are able to remember and record accurate dosages for children under five.
* The cost of treating fevers in children under five in the intervention area was 28 cents per treatment, which is more than half of the daily wage of a rural laborer in Malawi.
* The projected costs of training TBAs nationwide and treating fevers in children under five was shown to be significant.

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The Rehydration Unit As A Center For Training In The Federico Gomez Children's Hospital of Mexico City

Martha M. Lopez DeMontero, M.D. M.P.H.
Consultant PAHO/AED

NATIONAL COUNCIL OF INTERNATIONAL HEALTH CONFERENCE

ABSTRACT

In Mexico, as a first step in a national training effort to prepare local health personnel in the proper use of oral-rehydration therapy for the management of infant diarrhea, representatives for each of the 31 states and the Federal District have been trained in the Children's Hospital in Mexico City. The focus of the training is the newly established rehydration unit within the Hospital. This presentation describes the role of the unit within the training.

TITLE: The Rehydration Unit As a Center for Training in the Children's Hospital, Mexico City.

PRESENTERS: Dra. Martha Lopez DeMontero, Consultant, PAHO/AED

Dr. Felipe Mota, Director of Training, Children's Hospital, Mexico.

INTRODUCTION

Thank you.

I am very happy of having the chance of sharing with you my experience in Mexico and it is related with the other side of the coin - the health profession.

First, I am going to give you a little background of the health situation of children under 5. Next, I am going to share with you one of the strategies used to overcome the resistance of the health professionals in using ORT in diarrhea cases. Last, I will show you the results obtained, which I promise will impress you.

I. BACKGROUND

Diarrheal diseases in Mexico, as in other Latin American countries, have been, and continue to be, one of the most important public health problems. Diarrheal diseases claim the lives of approximately 30,000 children under the age of 5, each year.

The first serious obstacle for implementing this oral rehydration therapy was that the physicians and health-care professionals would not accept the advantages of using ORT in treating dehydration caused by diarrhea, despite information received thru conferences, courses and national seminars.

In addition, their negative influence was a decisive factor in the behavior of mothers faced with an episode of diarrhea. Mothers imitated the actions of health personnel eliminating feedings and indiscriminately using antibiotics and antidiarrheal drugs. This misbehavior resulted in serious iatrogenic consequences which led progressively to malnutrition, infections, prolonged diarrhea, and worst malnutrition.

These disturbing facts are common to many countries in this, and other continents. But it is even worst, that they should continue in Mexico, where the use of ORT began, in 1959. That year, Dr. Victor Ceballos, using a household formula containing sugar, salt, and sodium bicarbonate, demonstrated that a reduction in mortality from 32 to 7.4 per 10,000 children under the age of five, could be obtained.

This background gradually created an awareness on the part of health authorities of the magnitude and seriousness of the problem.

II. START OF THE PROGRAM OF ORAL REHYDRATION IN DIARRHEA CASES.

In 1984 the program of oral rehydration therapy was started.

The most important activities carried out in 1984 were:

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- The First International Seminar-Workshop on ORT and diarrheal disease. Its purpose was to update and motivate all institutions, in order to gain their commitment to carry out the national program.

- The second activity, was to hold the First National Course in Planning and Management of CDD Programs.

- Then, the plan of action for the National Program, was designed.

- Last, the ORT Training Unit at the F. G. Children's Hospital was built with the economical support of UNICEF. It has been in service since August 1984. (Slides 3, 4, 5, ... but the first place to use ORT was the .....)

These four very important activities were carried out with both domestic and international resources. One of the basic results was those actions the coordination and support of International Organizations interested in activities to promote infant survival thru a primary health strategy.

In early 1985, a PRITECH assessment team visited Mexico with support from AID. Its mission was to assess the CDD Program and make recommendations. By implementing these recommendations we could reduce and eliminate the obstacles detected as hindering normal development of the CDD and ORT programs.

The following recommendations were offered as a means to quickly broaden the program's effective coverage:

- The first was the execution of an aggressive training program in the use of ORT among physicians and other health personnel. This recommendation was promptly implemented and its results are the subject of this presentation.

- The second one was the design and implementation of operational research. Its purpose was to identify consumer beliefs and practices.

III. DESIGN AND EXECUTION

The next thing I am going to share with you is the clinical training program that was the answer to the need to overcome the resistance from health-care professionals.

1. Objectives.

The objectives of the Clinical Training Program in ORT were:

FIRST: to improve the comprehension of the phisiopathological progress of diarrheal disease and its clinical management.

SECOND: to develop and/or update skills in the management of the diarrheal disease cases through the proper use of ORT.

THIRD: to implement and organize an ORT Training Unit in the trainee's home hospital.

LAST: to train health personnel under their supervision and also to organize regional workshops.

2. Selection Criteria

In order to reach the objectives, the following selection criteria was used to decide which states and which health personnel would participate in the program.

- o states with high rates of morbidity and mortality due to diarrhea in children under five detected by the National Survey of Morbidity and Mortality due to Diarrhea
- o outlying states.
- o in the states selected the personnel had to meet the following requirements:

  - + One physician (pediatrician): preferably the head of the Emergency Department or Head of Research and Education Department. Leadership and administrative authority for setting up an ORT Training unit in his hospital was essential.
  - + One Nurse: with supervision responsibilities and demonstrated technical and administrative leadership in the state. Personal motivation for the program and the ability to work as a team with the pediatrician was necessary; and
  - + One physician or Nurse: responsible for the CDD and ORT Program at the state level.

3. Selection Procedure

By using these selection criteria, 19 states were selected. next, a team of three health-care professionals was chosen from each of the 19 states.

4. Goals

After the selection was made, the following goals were established:

- o the first was to train the 19 teams in the treatment of diarrhea cases through the use of ORT.
- o next, to assist the teams in the organization of an ORT training unit in each of the 19 states.
- o last, was that each team should train at least 20 health care professionals in their home states.

5. Organization and Operation.

The responsibility for the administrative organization was assigned to the General Director of Preventive Medicine. The technical one fell to the F.G. Children's Hospital of Mexico City. AID/PRITECH/HEAL/PAHO were the International Organizations that offered their economic support and advice, so that the program should run smoothly.

Training in ORT CASE MANAGEMENT lasted one week and was done in the ORT unit of the F.G. Children's Hospital.

The following topics were covered:

- o physiopathological bases of diarrhea and dehydration
- o case management
- o epidemiology of diarrhea
- o creation and administration of ORT units.
- o record keeping
- o research
- o mother's education.

The clinical training was supported with lectures bibliographic material, case presentations, and group discussions. The objective was to share first-hand experience in patient treatments, and also to obtain relevant technical information from experienced staff.

The basics for the creation of an ORT training unit in each home state hospital was taught to the teams. This was done in order to prepare them for the challenge they would have to face, when implementing a different way of treating diarrhea.

Two teams were trained at the same time, and the guidance was provided by the staff of the ORT unit.

As a practical task, in addition to handling clinical cases, each state team designed a work plan for the creation of the ORT unit. It would serve as a guide of

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subsequent supervisory and support visits. Also at the beginning and end of each course, a knowledge evaluation questionnaire was given to measure any changes. A curricular certificate of participation in the course, was also given.

Trained personnel were visited one during the year to observe the results of the training and to offer advice and support if necessary.

The GDPM organized and held four regional meetings. That was done, in order to motivate and bring a greater number of the region's professionals up to date on the activities related to the CDD program. These meetings, held as seminars-workshops, were attended by about 1,600 health professionals from the country's 31 states.

IV. RESULTS OBTAINED

The following results were obtained:

A. At the F.G. Children's Hospital the objectives were fully achieved and training goals were surpassed. More important however, was the change in the behavior of health professionals. The change was reflected not only in the increasing use of ORT, but also in the important multiplying function they performed upon returning to their home hospitals.

B. Mexico now has more than 1,000 people trained to use ORT. In each state the goals were fully reached, and in most states they were surpassed. Upon returning to their home states, the teams created a great mobilization in the health sector, and community. They did it through private medical organizations, like PEDIATRIC AND MEDICAL ASSOCIATIONS, UNIVERSITIES AND INSTITUTIONS, to which they belonged. The number of ORT units in the country is now 26, including the one in the F.G. Children's Hospital in Mexico City.

It is important to point out that as a direct result of the ORT Clinical Training Program, the F.G. Children's Hospital decided to routinely incorporate a monthly monographic course in clinical training for the use of ORT, in 1987 is full through November 1987. It has become necessary to schedule courses outside the routine program, in order to meet demand from Mexico and abroad

V. CONCLUSION

Before I leave you today, I want to let you know that a "triggering mechanism" has been put into action which will have a great impact on childhood mortality throughout Mexico.

The Diarrheal Training Unit in the F.G. Children's Hospital already caused a big change in the attitude and behavior of health personnel toward the correct treatment of diarrhea.

As a consequence of this change, the mothers are also modifying their behavior. This was proved the the last KAP National Survey which shows that not only the percentage of mothers knowing about ORS has reached 59.8%, but also that the use of ORS increased from 9% in December in 1985, all the way to 44.5% in December 1986.

God knows, we still have a long way to go, but if we could change:

	-	the use of antidiarrheal drugs	for	the use of ORT
	-	the overuse of antibiotics	for	hygiene practices
	-	fasting	for	feeding
	-	I.V. therapy	for	ORT therapy
and	-	fear of diarrhea	for	fear of dehydration

THEN

WE WOULD HAVE WON THE BATTLE.

NEW TRENDS: MAXIMIZING PUBLIC AND PRIVATE SECTOR RESOURCES THROUGH COLLABORATION

Academy for Educational Development
Susan G. Saunders

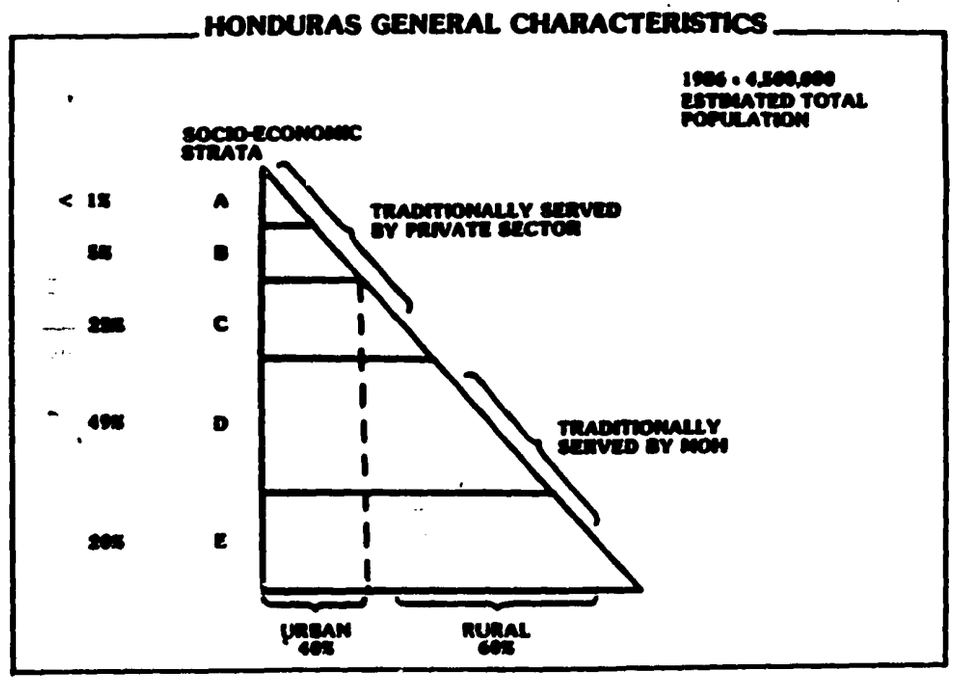
Ministry of Health
Dr. Carlos Ernesto Fiallos
Dr. Fidel Barahona
Lic. Maria Rosa Bonano

In 1986, the Honduran Ministry of Health decided to increase the availability and use of oral rehydration therapy through social marketing. Based on a review of their diarrheal disease control program, the Ministry decided to develop a bifurcated strategy to achieve this goal: first, they decided to strengthen the Ministry activities at the community level and second, to develop a social marketing program within the private sector. This presentation focuses on the development of the second strategy and how the public and private sectors in Honduras are collaborating to meet a formerly unmet need. The Ministry of Health asked the Academy for Educational Development to assist them under the Communication for Child Survival (HEALTHCOM) project.

The process for developing the private sector strategy consisted of three phases: a prefeasibility study conducted in the spring of 1986; a series of marketing research studies conducted during the summer and fall of 1986; and a feasibility study in the spring of 1987. In summary, we:

- Identified and analyzed the marketing infrastructure,
- Assessed the institutional capacity for production, distribution, administration and promotion of ORS,
- Assessed the market potential, and
- Defined the role of the Ministry and the private sector in terms of audience reach, production, distribution and promotion.

We began by examining the general characteristics of the Honduran market place.



In 1986, the total population was estimated to be 4.5 million, with 40 percent of the population living in urban areas and the remaining 60 percent residing in rural areas. One-third of the population lives in Tegucigalpa and San Pedro Sula.

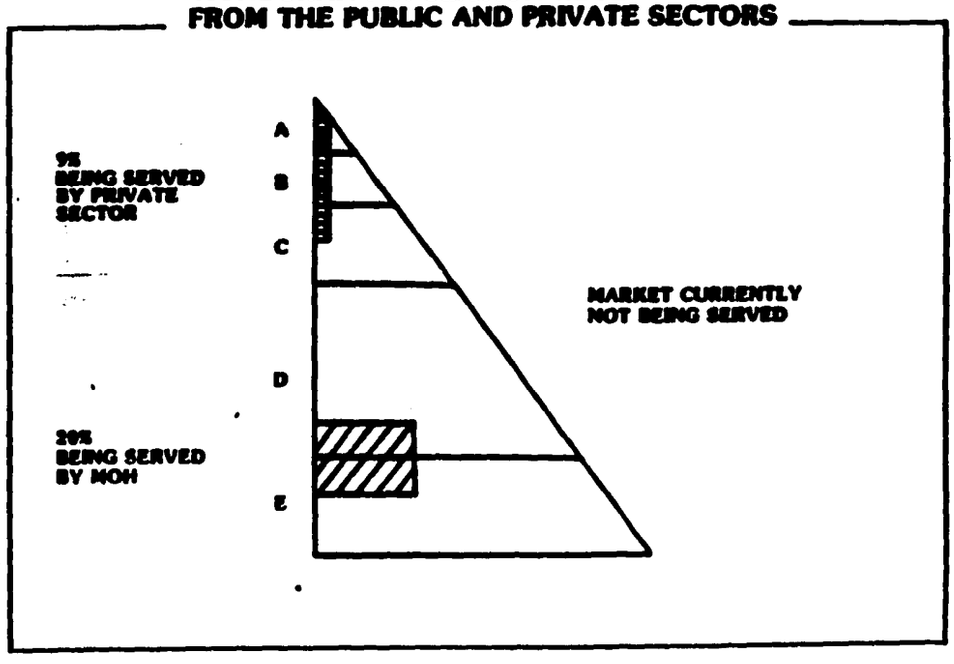
We stratified the Honduran population into five socio-economic groups. Group A is approximately one percent of the population, B is five percent, C is 25 percent, D is 49 percent, and E is 20 percent. An unknown percentage of E is outside of the cash economy. The average per capita income is U.S. $500.

Traditionally, the private sector serves the A, B, and a significant portion of C Groups, since these people are primarily located in urban areas and have the ability to pay for private medical services. Levels D and E and a percentage of C traditionally seek services from the Ministry of Health facilities. Since a large percentage of D and E Groups reside in rural areas, access to health facilities is somewhat limited.

According to the 1980 health sector assessment, 31 percent of the population had reasonable access to MOH facilities and 31 percent had limited access. (Reasonable access was defined as living within 45 minutes walking time or three kilometers of a health facility.) This has improved over the past six years with the addition of a number of rural health centers which now total more than 600. There are approximately 300 pharmacies and outlets licensed to sell medicines. These outlets are primarily located in urban areas--that is, towns with a population over 2,000.

Since the health status is better in Groups A and B, diarrheal disease and its associated problems is not as severe as in Groups C, D and E. Recent studies conducted by the Ministry of Health determined that approximately nine percent of the population receives treatment for diarrhea from the private sector, and the Ministry of Health provides ORT treatment for 20 percent of the population.

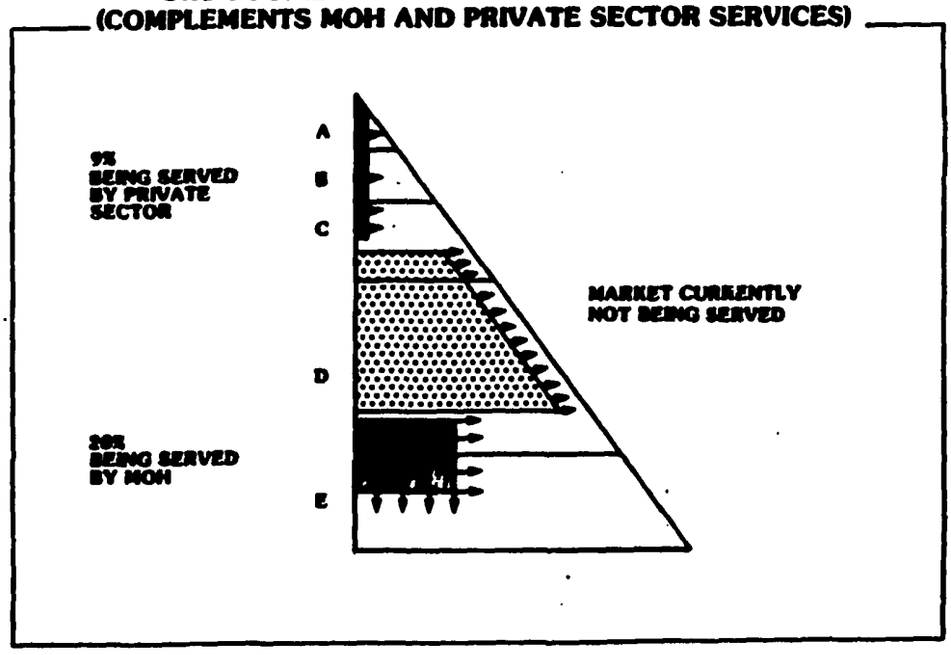
HONDURAN POPULATION RECEIVING ORT FROM THE PUBLIC AND PRIVATE SECTORS



It was evident that a large percentage of the population was not being served for diarrheal disease and dehydration. Why was this?

- Inability to pay for products available through private sector channels (pharmacies, licensed medical outlets).
- Lack of access to service providers (ministry, physicians in private practices, pharmacies and other licensed outlets), and
- Lack of choice to seek treatment from sources other than the Ministry of Health facilities.

ORS SOCIAL MARKETING MEETS UNMET NEED
(COMPLEMENTS MOH AND PRIVATE SECTOR SERVICES)



It was clear there was an unmet need. We had to reach people who were not currently seeking services from the private sector or MOH facilities, who lived in rural areas, and who had limited ability to pay for products and/or services. Availability, accessibility, affordability, and acceptability of ORS could be addressed through a social marketing program which complemented existing efforts of the Ministry and private sector.

The Ministry decided to explore the feasibility of how the private sector could be used to increase the availability and use of ORS. Could the type of outlets selling ORS be expanded? Would these retail outlets sell ORS? Would consumers buy ORS there? Would existing commercial distribution channels carry the product? Would the private sector participate?

The challenge became to understand the needs of the market place, the marketing infrastructure, the strengths of the public and private sectors, and to design a program that met the unmet need as well as complemented the work of the Ministry and the services of the private sector.

We needed to understand more about the private sector--its goals, what was important to it, and how it viewed the public sector. We needed to review the same aspects about the public sector. So, we began to think through what the public sector as well as the private sector's goals were.

Public Sector Goals:

- To improve the quality of life,
- To control and reduce public health problems,
- To ensure access to service, treatment, and education for those who cannot afford to pay for private services, and
- To be cost effective.

Private Sector Goals:

- To provide a quality product or service, and
- To make a profit.

Some of the key questions asked by the public sector before taking on a new initiative are:

- Will this service or treatment help to improve the quality of life?
- Does this service or treatment address a major health problem?
- Is this compatible with our policy? Programs and plans? Our resources?
- How much will it cost?
- What will the benefits be?

The private sector asks a different set of questions:

- Can a profit be made?
- Is there a demand for the product?
- Who would use it?
- Is it of high quality?
- Does this product fit within our existing product line?
- If not, do we want to expand our product line?
- Will it enhance our image?
- What, if any, is the role of the government?

As this process unfolded, a number of perceptions began to emerge from the public sector about the private sector and from the private sector about the public sector. These perceptions reflected a series of concerns which influenced the thinking. It is not a question of whether the perceptions are right or wrong, but that they exist. Their existence affects if and how the public and private sectors can and will work together.

Concerns of the public sector about the private sector:

- Has different goals,
- Provides services and products that are not essential,
- Serves different segments of the population,
- Wants to make a profit, don't want to help people,
- Receives high salaries and many incentives, and
- Cannot be trusted, is corrupt.

Concerns of the private sector about the public sector:

- Has a lack of staff motivation to get work done,
- Has an abundance of rules and procedures which interfere with progress,
- Does not have a performance-based incentive system,
- Is influenced too much by politics,
- Has limited resources, and
- Is corrupt, inefficient, and controlling.

Articulating and understanding these concerns is the beginning of developing the foundation for new alliances between the public and private sectors. Ignoring them or denying them can lead to growing suspicions and false expectations. And, as we all know, one of the factors which can influence the success of development programs is government support.

Next we had to develop some basic operating principles. There were two principles which stood out. The most fundamental principle was understanding that a good deal was one where each party benefitted--when one party had something to offer that the other wanted. The second was operating to and maximizing strengths--that it is important to build from institutional capabilities.

The strengths of the public sector are:

- Developing policy and programs to meet the health needs of the country,
- Many years of experience with diarrheal disease control programs, and
- Knowledge of the complexity of marketing ORS to mothers and understanding of the components of an effective demand creation program.

The strengths of the private sector are:

- Ability to produce and distribute a quality ORS product,
- Ability to distribute the product to commercial outlets frequently and in a cost-effective fashion,
- Ability to reach an audience not served by the Ministry, and
- Ability to respond to changes in the market place rapidly.

We learned a number of things which influenced design of the program.

Production:

- There is a capacity to produce a quality ORS product in the public and private sector, and
- The cost of producing ORS is less in the private sector than in the public sector.

Distribution:

- There are more retail outlets than MOH facilities,
- Increasing the number and type of outlets will increase availability of ORS,
- Commercial systems get resupplied more frequently than MOH facilities, and
- Commercial distribution systems are efficient since each tier makes a small profit on items distributed.

Consumers:

- Are willing to pay for medicines,
- Place more value on items paid for than those they receive free, and
- Consumers in C, D, and E Groups may not be able to afford products available in pharmacies.

Before we refined the program goal, we developed a working definition of social marketing: it is the application of commercial marketing techniques and business practices to produce a social benefit. Social marketing is a hybrid of public health oriented social action programs. It is the application of marketing tools: marketing research, product development, pricing, promotion, and distribution. It encourages societally beneficial behaviors by appealing to people's self interest.

The goal of the private sector social marketing program has evolved over the year as we learned more about the needs and capabilities:

GOAL: THE PRIVATE SECTOR SOCIAL MARKETING PROGRAM IS TO:

- Produce and package a quality ORS product using the WHO formula by a local manufacturer
- Which will be distributed through existing commercial distribution systems
- To retail outlets concentrated in rural areas and
- Sold at affordable price to rural mothers
- With a promotion program designed to stimulate and increase demand for ORS

Given these as the basis, a series of models have been developed.

MODELS

MODEL A: Manufacturer and distributor are the same organization

A1: An ethical product manufacturer and distributor

A2: A popular medicine manufacturer and distributor

MODEL B: Manufacturer and distributor are not the same organization

MODEL C: Manufacturer and one distributor are the same organization and second distributor is different

1. **Model A: Manufacturer and distributor are the same organization.**

In Model A, the manufacturing and distribution functions are carried out by the same organizations. This model can be classified into two distinct subgroups. Model A1 is a company who has an ethical product line, and in A2 the company's product line focuses on popular medicines.

In general, these companies produce name brand products under license with an international manufacturer, import a finished product, or develop their own products. The marketing management process (product positioning, promotional message content and materials, bonus and incentive plans or special offerings) varies according to the type of product and the manufacturer. In some cases when the product is produced under license or imported as a finished good, the international manufacturer may supervise the activities of the local firm and provide marketing support.

Resources available within each organization vary according to size of business, number and type of products, and years in business. These organizations have the ability to import raw materials, register products (name brand, package, price) with the Colegio de Farmaceutica, salesmen, distributors, production personnel, and other necessary administrative staff and the facilities for warehousing, production, packaging and shipping.

In general, both types of companies take orders and deliver products or sell directly to the retailers and mayoristas. Credit is frequently provided to retail outlets where there are established relationships; other sales are cash on delivery of the products.

There are five distinct differences among the two options. First, ethical products (those that are name brand or imported) must be registered with the Colegio and the contents must undergo a chemical analysis. Generics and all other products must have the name brand and package contents registered with the Colegio prior to sale. Second, ethical products are restricted to sales in pharmacies, puestos de ventas de medicinas and hospitals. Sales of popular medicines are non-restricted. The number of licensed ethical outlets is substantially less that the number of general merchandising stores. Third, margins for ethical products are related by law, whereas margins on popular medicines are not. Fourth, ethical companies have a staff of medical detailers who make special visits to physicians to promote products. Fifth, ethical manufacturers are more likely to have more sophisticated quality control procedures.

2. **Model B: Manufacturer and distributor are not the same organization.**

There are two different companies in Model B. One is the manufacturer; the other is the distributor. It is similar to Model A in the respect that the type of companies are both ethical and popular medicine manufacturers or distributors. In Model B, the manufacturer would be an ethical producer who would sell to a popular medicine manufacturer or distributor. This model is based on the concern for quality control during production and the need to achieve widespread and deep market penetration in the rural areas.

3. **Model C: Manufacturer and one distributor are the same organization and the second distributor is different.**

Model C is a combination of Models A and B. This model consists of an ethical manufacturer and distributor who would market the product to ethical outlets and sell the product in sufficient quantity to a popular medicine or consumer goods distribution company.

The Ministry wants the private sector:

- To have a quality product produced, and
- To distribute this product to rural outlets.

The private sector wants:

- To produce and distribute the ORS product,
- To make a reasonable profit while doing this, and
- To avoid government interference.

The Ministry has taken on the unique role of examining the market place, assessing the need, the market potential, and the infrastructure and associated costs. The Ministry has made a major investment in the development of expanding the ORS market in country. The private sector is interested in doing what it does well--marketing.

cD